

IN THE CLAIMS

Please amend the claims as follows:

1. (presently amended) A method for setting a value within a type of service (TOS) field in an Internet Protocol (IP) datagram, wherein in accordance with an application level protocol at which said IP datagram is transported within a socks connection being sent from a source application that resides within a source device to a destination application that resides within a destination device, said method comprising ~~the steps of:~~

~~determining a source device address of said source device;~~

~~determining a destination device address of said destination device;~~

~~determining a source application level protocol for said source device application;~~

~~determining a destination application level protocol for said destination application;~~

~~determining a type of service value from a first table, wherein for said socks connection said first table includes:~~

~~said determined source device address;~~

~~said determined destination device address;~~

~~said determined source application level protocol; and~~

~~said determined destination application level protocol; and~~

determining whether or not said IP datagram is a socks connect message;

in response to a determination that said IP datagram is a socks connect message,

determining from said IP datagram an Application Level protocol (ALP)
transported by a socks connection;

locating from a type of service (TOS) definition table a record
corresponding to said ALP of said IP datagram; and

determining from said located record a TOS value; and

subsequently writing said determined ~~type of service~~ TOS value into said ~~type of service~~ TOS field of said IP datagram, wherein said TOS value is based on said ALP transported by said socks connection.

2. (presently amended) The method of ~~claim~~ Claim 1, wherein said IP datagram ~~comprises~~ includes an IP header ~~that includes~~ having a source IP address field and a destination IP address field, wherein said IP datagram further ~~comprising~~ includes a source port field and a destination port field, wherein said method further includes ~~comprising the steps of:~~

~~determining said source device address by reading said a source device address of~~
said source device from said source IP address field;

~~determining said destination device address by reading said a destination device~~
address of said destination device address from said destination IP address field;

~~determining said source application level protocol by reading a source application~~
address of said source device from said source port field;

~~determining said destination application level protocol by reading a destination~~
application address of said destination device from said destination port field.

3. (presently amended) The method of ~~claim~~ Claim 1, wherein said IP datagram ~~comprises~~ includes a header checksum field, ~~and~~ wherein said ~~step of~~ writing said ~~type of service~~ determined TOS value in said ~~type of service~~ field further includes ~~comprising the steps of:~~

computing a ~~value of a~~ header checksum value for said IP datagram according to said ~~type of service~~ TOS value; and

writing said computed header checksum value into said header checksum field.

✓ Please cancel Claims 4-30.

✓ Please add Claims 31-45 as follows:

31. (new) The method of Claim 1, wherein said method further includes storing in a socks connection table a new entry containing said TOS value.

32. (new) The method of Claim 1, wherein said determining whether or not said IP datagram is a socks connect message is performed by a socks traffic analyser component within associated with said source device.

AI 33. (new) The method of Claim 1, wherein said writing said determined TOS value is performed by a socks TOS finder component within associated with said source device.

34. (new) A system for setting a value within a type of service (TOS) field in an Internet Protocol (IP) datagram, wherein said IP datagram being sent from a source application that resides within a source device to a destination application that resides within a destination device, said system comprising:

means for determining whether or not said IP datagram is a socks connect message;

in response to a determination that said IP datagram is a socks connect message,

means for determining from said IP datagram an Application Level protocol (ALP) transported by a socks connection;

means for locating from a type of service (TOS) definition table a record corresponding to said ALP of said IP datagram; and

determining from said located record a TOS value; and

means for subsequently writing said determined TOS value into said TOS field of said IP datagram, wherein said TOS value is based on said ALP transported by said socks connection.

35. (new) The system of Claim 34, wherein said IP datagram includes an IP header having a source IP address field and a destination IP address field, wherein said IP datagram further includes a source port field and a destination port field, wherein said system further includes:

means for reading a source device address of said source device from said source IP address field;

means for reading a destination device address of said destination device address from said destination IP address field;

means for reading a source application address of said source device from said source port field;

means for reading a destination application address of said destination device from said destination port field.

36. (new) The system of Claim 34, wherein said IP datagram includes a header checksum field, wherein said writing said determined TOS value further includes:

means for computing a header checksum value for said IP datagram according to said TOS value; and

means for writing said computed header checksum value into said header checksum field.

37. (new) The system of Claim 34, wherein said system further includes means for storing in a socks connection table a new entry containing said TOS value.

38. (new) The system of Claim 34, wherein said means for determining whether or not said IP datagram is a socks connect message is a socks traffic analyser component within associated with said source device.

39. (new) The system of Claim 34, wherein said means for writing said determined TOS value is a socks TOS finder component within associated with said source device.

AI 40. (new) A computer program product for setting a value within a type of service (TOS) field in an Internet Protocol (IP) datagram, wherein said IP datagram being sent from a source application that resides within a source device to a destination application that resides within a destination device, said computer program product comprising:

program code means for determining whether or not said IP datagram is a socks connect message;

in response to a determination that said IP datagram is a socks connect message,

program code means for determining from said IP datagram an Application Level protocol (ALP) transported by a socks connection;

program code means for locating from a type of service (TOS) definition table a record corresponding to said ALP of said IP datagram; and

determining from said located record a TOS value; and

program code means for subsequently writing said determined TOS value into said TOS field of said IP datagram, wherein said TOS value is based on said ALP transported by said socks connection.

41. (new) The computer program product of Claim 40, wherein said IP datagram includes an IP header having a source IP address field and a destination IP address field, wherein said IP datagram further includes a source port field and a destination port field, wherein said computer program product further includes:

program code means for reading a source device address of said source device from said source IP address field;

program code means for reading a destination device address of said destination device address from said destination IP address field;

AI
program code means for reading a source application address of said source device from said source port field;

program code means for reading a destination application address of said destination device from said destination port field.

42. (new) The computer program product of Claim 40, wherein said IP datagram includes a header checksum field, wherein said writing said determined TOS value further includes:

program code means for computing a header checksum value for said IP datagram according to said TOS value; and

program code means for writing said computed header checksum value into said header checksum field.

43. (new) The computer program product of Claim 40, wherein said computer program product further includes program code means for storing in a socks connection table a new entry containing said TOS value.

44. (new) The computer program product of Claim 40, wherein said program code means for determining whether or not said IP datagram is a socks connect message is a socks traffic analyser component within associated with said source device.

A1

45. (new) The computer program product of Claim 40, wherein said program code means for writing said determined TOS value is a socks TOS finder component within associated with said source device.
